

Message

From: mahall@mt.gov [mahall@mt.gov]
Sent: 7/31/2017 4:46:28 PM
To: Kuziomko, Joseph [kuziomko.joseph@epa.gov]; rholmes@mt.gov; Kirkpatrick, Denise [dkirkpatrick@mt.gov]; akron@mt.gov
CC: Shuster, Kenneth [Shuster.Kenneth@epa.gov]; Pena-Molina, Ana [pena-molina.ana@epa.gov]; Kohler, Amanda [Kohler.Amanda@epa.gov]
Subject: RE: ORCR Project regarding OB/OD sites in Montana
Flag: Follow up

Joseph,

Thank you for your inquiry about Montana Hazardous Waste Emergency Permit MTHWP-93-01 issued to Rocky Mountain Laboratories in 1993, by the Montana Department of Health and Environmental Sciences, the predecessor agency to the Department of Environmental Quality. As background, the emergency OB/OD permit was issued to allow the one-time detonation of approximately one gallon of an unstable mixture of picric acid, perchloric acid, chloroform and other lab chemicals because transportation to a permitted TSDF was considered to be unsafe. The mixture was determined to be ignitable (D001), an oxidizer (D001) and chloroform (D022); no other characteristic or listing applied. Detonation occurred at a car crushing facility on nearby land owned by Montana Fish Wildlife and Parks and operated by Ravalli County. The detonation was conducted by the Missoula County Sheriff's Bomb Squad.

You asked DEQ to verify the RCRAinfo codes for the facility. Upon review of site history, codes and the RCRAinfo data element dictionary, I believe the present legal status code of PT is incorrect. I believe the legal status should have remained as EM, and not been changed to PT in 2005. According to the data element dictionary,

Legal Status Code - EM EMERGENCY PERMIT (Non-core.) Use EM for units regulated by the provisions for emergency permits under section 270.61. An EM unit should remain in that legal status throughout the life of the unit, including closure.

Emphasis added. In light of this discovery, I intend to change the facility's legal status code to EM.

To the extent that the remaining questions are still relevant to your study, I reviewed the facility's file and answered the questions in the order presented below.

1. Did these sites complete clean closure or are they still in the process of seeking to clean close? The site was considered to be clean closed in August 1993.
2. Did the state officially certify/approve the unit(s) Clean Closed (CC)? A review of the file did not reveal any correspondence officially approving the clean closure. That the agency entered CC into RCRAinfo indicates the agency concurred with the final report's finding that no hazardous characteristic remained after the OB/OD.
3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation? The permit was issued for a one-time detonation of about one gallon of material in June 1993.
4. Was it OB or OD or both? Both.
5. What sampling procedures were used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)? Grab samples of the sand bed described in the answer to Question 6 and adjacent soil were taken prior to detonation. A sample of the detonation ash and sand approximately one foot below the detonation surface were taken after blast. The ash sample was analyzed for TCLP volatile solvents. If the ash exhibited any characteristic of the of the TCLP solvents, the lab was instructed to analyze the rest of the samples. Analytical results indicate that the TCLP regulatory threshold was not exceeded in the ash sample.
6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)? The single OB/OD event took place at a car crushing facility on land owned by Montana Fish Wildlife and Parks and operated by Ravalli County. No engineered components were constructed for the OB/OD event. Sand obtained from a local gravel

pit was applied to the ground in a pile at the detonation site. The container of lab chemicals to be detonated was placed in a bunker approximately four feet wide and two feet deep dug into the sand in order to contain the detonation debris. Immediately following the detonation, approximately five gallons of detonation debris and ash was collected from the sand bunker.

7. What clean-up procedures and techniques were used to clean up the contaminants (e.g., excavation, soil sifting)? Following receipt of analytical results, approximately five gallons of nonhazardous blast residue and ash was disposed of at a licensed solid waste landfill.
8. What data was recorded and metrics used to evaluate the extent and levels of contamination? In addition to the information obtained in the answer to Question 5, an HNu photo ionization detector was used after detonation to determine the concentration organic vapors in the vicinity of the site. After about 30 minutes, the concentration was about 2 to 2.5 ppm. The background value at the detonation command post near the car crushing unit was about 25-30 ppm.
9. What criteria was used to certify clean closure (e.g., EPA action levels)? Sample results noted in the answer to Question 5 were compared to relevant TCLP standards.
10. What was the total cost to achieve Clean Closed (CC) status? The cost to achieve clean closure is not known.

If you have any questions about this email, please do not hesitate to contact me at the information below

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From: Kuziomko, Joseph [mailto:kuziomko.joseph@epa.gov]
Sent: Monday, July 17, 2017 10:49 AM
To: Hall, Mark; Holmes, Becky; Kirkpatrick, Denise; Kron, Ann
Cc: Shuster, Kenneth; Pena-Molina, Ana; Kohler, Amanda
Subject: ORCR Project regarding OB/OD sites in Montana

I am writing to seek information on the closure status of the Open Burn/Open Detonation (OB/OD) units listed below to assist ORCR in a new project to assess closure of OB/OD units. With this information, EPA will be able to identify, evaluate, and document procedures, techniques, and criteria to assess, clean up, and close OB/OD units/sites in a standardized manner.

EPA has been documenting soil and ground water contamination from OB/OD units and the costs to clean them up. Given the inordinate extent of contamination and costs of clean-up that have been reported, we are now seeking to learn more about the monitoring, clean-up procedures, successes, and costs of these efforts. There is currently no national guidance on procedures to assess, monitor, and clean up OB/OD sites, nor metrics to achieve clean closure of OB/OD units. We are requesting information on the clean closure (CC) of OB/OD sites to assist us.

Please first verify the following codes for your facilities in Montana.

Montana							
FACILITY_ID	FACILITY_NAME	UNIT_NAME	UNITs	UNIT_DETAIL_SEQ	legal status	operating status	EFFECTIVE_DATE
MT3750802875	ROCKY MOUNTAIN LABORATORIES	OPEN DETONATION	1	1	PT	CC	19930621

Questions:

We have a number of questions we hope you can answer regarding your clean closed/closing sites. The operating status of the facilities will determine which sets of questions are to be answered. We understand that some of this data may be difficult to find but we would really appreciate if you could dig it up for us as it will help us move forward with this project and eventually help EPA update OB/OD closing procedures.

Clean Closed (CC) Facilities' questions:

1. Did these sites complete clean closure or are they still in the process of seeking to clean close?
2. Did the state officially certify/approve the unit(s) Clean Closed (CC)?
3. What was the volume of waste disposed, frequency (e.g., daily, weekly, monthly, periodically), and years of operation?
4. Was it OB or OD or both?
5. What sampling procedures were used to identify the extent of the contamination, including kick-out and fallout (e.g., geophysical techniques used to identify buried munitions and fragments; trenching; grid, spokes, meandering way, visual, or random sampling of soil/for kick-out; depth; until no more found; and ground water monitoring)?
6. Were components of the unit removed (e.g., any platforms, pans, pads, and liners)?
7. What clean-up procedures and techniques were used to clean up the contaminants (e.g., excavation, soil sifting)?
8. What data was recorded and metrics used to evaluate the extent and levels of contamination?
9. What criteria was used to certify clean closure (e.g., EPA action levels)?
10. What was the total cost to achieve Clean Closed (CC) status?

We plan to have a contractor gather this information on a select number of sites from the states. The purpose of this current effort is to gather information on the status of cleanup at these sites to help us identify which sites have the best information for our contractor to follow up with. Thus, for this effort, we seek answers to questions 1-4 and the last question in each set, and for the remaining questions we seek whether or not good information exists to answer these questions. We hope to receive this information by **July 31st**. Thank you for taking time to assist us with this project. If you have any questions, please feel free to reach out to us. Any information that you may be able to provide will be helpful in our project.

Sincerely,
Joseph Kuziomko
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